Wall mount type RAID model

MPC-WA1RA

User's Manual

CONTEC CO.,LTD.

Check Your Package

Thank you for purchasing the CONTEC product.

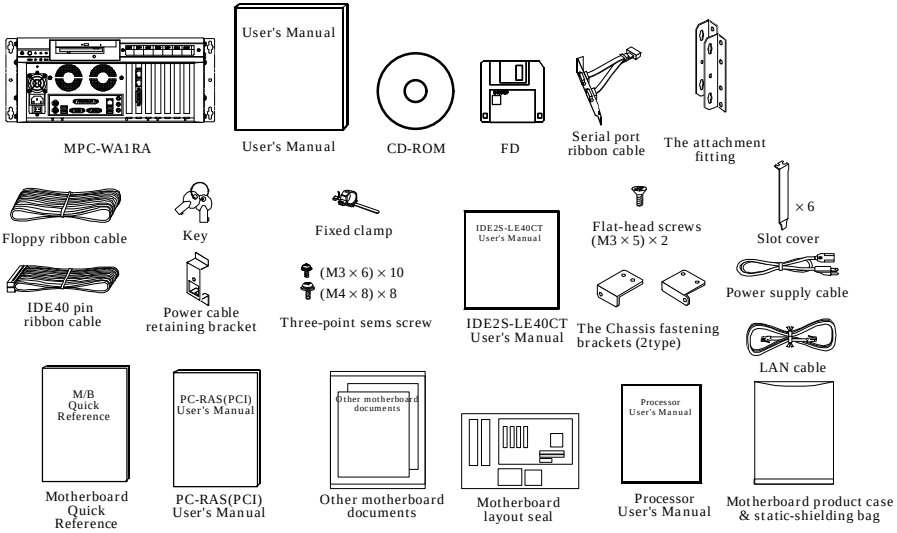
The product consists of the items listed below.

Check, with the following list, that your package is complete. If you discover damaged or missing items, contact your retailer.

Keep the motherboard product case with care as it is required if the motherboard is repaired or replaced.

Product Configuration List

- MPC-WA1RA …1
- This User's Manual …1
- Key…2
- The attachment fitting…2
- The chassis fastening brackets (2type) …2
- Fixed clamp…1
- Power cable retaining bracket …1
- Three-point sems screw (M3 x 6) …10
- Three-point sems screw (M4 x 8) …8
- Flat-head screws (M3 x 5) …2
- Power supply cable (125VAC 2.5m) …1
- LAN cable (cross 30cm category 5) …1
- Slot cover…6
- Serial port (9 pin D-SUB male) ribbon cable (With a bracket for attachment) …1
- PC-RAS(PCI) User's Manual…1
- PC-RAS(PCI) software library (FD) …1
- Motherboard Quick Reference…1
- Motherboard product case & static-shielding bag…1
- IDE40 pin ribbon cable…1
- Floppy ribbon cable…1
- Driver utility (CD-ROM) …1
- Motherboard layout seal…1
- Other motherboard documents…1 set
- Processor User's Manual…1
- IDE2S-LE40CT User's Manual…1



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1. Before Using the Product

This chapter provides information you should know before using the product.

About MPC-WA1RA

The MPC-WA1RA is an IBM PC/AT compatible, general-purpose computer with an Intel Pentium 4 4.2B GHz processor. The PC contains an HDD unit coming standard with a mirroring feature (supporting only RAID1).
The MPC-WA1RA includes a CONTEC RAS board as a standard component, capable of operation monitoring (temperatures, voltages, fans, RAID), remote control and monitoring through a web browser, watchdog timer operation, and general-purpose input/output.
The MPC-WA1RA uses a full front-maintenance type of chassis for easier maintenance.

Please read this manual carefully before connecting to the external device or performing system configuration.

Features

- Genuine Intel motherboard used
- Standard with a Pentium 4 2.4B GHz (533-MHz FSB) as the CPU
- Standard with 256 MB of DDR SDRAM (DDR333 PC2700)
- HDD unit standard with a mirroring (RAID1) feature
- Front maintenance structure allowing the PC to receive maintenance while remaining installed
- Standard with the CONTEC RAS board PC-RAS(PCI) that enables remote control through a web browser
- Standard with wall mount brackets dedicated to built-in use
- The chassis frame is made of hard-to-rust, strong stainless steel (SUS304).

Customer Support

CONTEC provides the following support services for you to use CONTEC products more efficiently and comfortably.

Web Site

Japanese	http://www.contec.co.jp/
English	http://www.contec.com/
Chinese	http://www.contec.com.cn/

Latest product information

CONTEC provides up-to-date information on products.

CONTEC also provides product manuals and various technical documents in the PDF.

Free download

You can download updated driver software and differential files as well as sample programs available in several languages.

Note! For product information
Contact your retailer if you have any technical question about a CONTEC product or need its price, delivery time, or estimate information.

Limited One-Year Warranty

CONTEC Products are warranted by CONTEC CO., LTD. to be free from defects in material and workmanship for up to one year from the date of purchase by the original purchaser.

Repair will be free of charge only when this device is returned freight prepaid with a copy of the original invoice and a Return Merchandise Authorization to the distributor or the CONTEC group office, from which it was purchased.

This warranty is not applicable for scratches or normal wear, but only for the electronic circuitry and original products. The warranty is not applicable if the device has been tampered with or damaged through abuse, mistreatment, neglect, or unreasonable use, or if the original invoice is not included, in which case repairs will be considered beyond the warranty policy.

How to Obtain Service

For replacement or repair, return the device freight prepaid, with a copy of the original invoice. Please obtain a Return Merchandise Authorization Number (RMA) from the CONTEC group office where you purchased before returning any product.

* No product will be accepted by CONTEC group without the RMA number.

Liability

The obligation of the warrantor is solely to repair or replace the product. In no event will the warrantor be liable for any incidental or consequential damages due to such defect or consequences that arise from inexperienced usage, misuse, or malfunction of this device.

Safety Precautions

Understand the following definitions and precautions to use the product safely.

Safety Information

This document provides safety information using the following symbols to prevent accidents resulting in injury or death and the destruction of equipment and resources. Understand the meanings of these labels to operate the equipment safely.

⚠ DANGER	DANGER indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING	WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
⚠ CAUTION	CAUTION indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or in property damage.

Handling Precautions

⚠ CAUTION

- Do not use or store the equipment in a hot or cold place, or in a place that is subject to severe temperature changes.
  Example - The place that is subject to direct sunlight.
  - The place that is near the hot place.
- Do not use or store the equipment in a highly humid or dusty place. It is very dangerous to use the equipment with water, liquid, or conductive dust left inside. If the equipment must be used in such an unfavorable environment, install it in a dusttight structure such as a dust-proof control panel.
- Do not use or store in environments subject to shock or vibration.
- Do not use or store the product near equipment generating a strong magnetic field or sounds.
- Do not use or store the product in the air that chemicals are giving off or the place that is near the chemicals.
- Clean the MPC-WA1RA by wiping lightly with a soft cloth moistened with water or a cleaning solution. Take care to avoid the use of benzene, thinners or other volatile solutions which may cause deformation or discoloration.
- Be sure to unplug the power cable from the wall outlet before mounting or demounting an expansion board or before connecting or disconnecting a cable to/from any connector.
- Do not modify the MPC-WA1RA. CONTEC will bear no responsibility for any problems, etc., resulting from modifying this product.
- If you find any fault or abnormal symptom (such as an unusual smell or overheat), unplug the power cable first and consult your local retailer.
- Use a power cable to be used must conform to the rated supply voltage and wall outlet to be used. (The attached cable is for 125VAC.)
- About the life expectancy of components.

  (1) Power supply : The lifespan is 30,000 hours for continuous operation at 40 degrees centigrade. Note, however, that it is shortened depending on the operating temperature (affected by high temperatures).

  (2) FAN : The lifespan of the chassis fan is 50,000 hours for continuous operation at 25 degrees centigrade. Note, however, that it is shortened depending on the operating temperature (affected by high temperatures).
  For the processor fan, refer to the processor manual.

  (3) Motherboard: The lifespan of the motherboard is eight years for continuous operation at 25 degrees centigrade. Note, however, that it is shortened depending on the operating temperature (affected by high temperatures).

  (4) Battery: For the battery on the motherboard, refer to the motherboard manual.
  For the battery on the RAS board, refer to the PC-RAS(PCI) manual.

  * CONTEC accepts your request for replacing each consumable in the MPC-WA1RA as a request for repair (at an additional cost).
- For connection to peripheral devices, use grounded shielded cables.

Special Note

Specifications

The MPC-WA1RA consists of individually commercial products. For details on the specifications of each of these components, refer to the corresponding manual or web site.

Intel Corporation HP : http://support.intel.com

Operation guarantee

Although CONTEC has checked the equipment for connectivity, the customer should evaluate it sufficiently as well before adopting the equipment.

Support

Questions and inquiries about individual components are also supported by their respective manufacturers.

- Moterboard [BOXD845GEBV2L] and processor [BX80532PE2400D]
  Maker : Intel Corporation
  Support site on the Web: http://support.intel.com

- For general information on the equipment or other components, contact the CONTEC general information center.

  CONTEC may not be able to answer questions or inquiries about hardware or software installed by the customer or about the entire system.

Initial defect

If any component develops an initial defect during normal operation within the guarantee period, it is handled by the manufacturer of the component. Contact your local retailer, and CONTEC will request the manufacturer to take appropriate action.

Fault and repair

If any component causes a fault that requires repair, it is handled by the manufacturer of the component.

Please note in advance that some manufacturers may not be able to analyze individual faults and to make answers in writing .

If a component causes a fault, contact your local retailer, and CONTEC will request the manufacturer to take appropriate action.

Environment

Use this product in the following environment. If used in an unauthorized environment, the chassis may overheat, malfunction, or cause a failure.

Operating temperature

5 to 35°C

Humidity

20 to 80%RH (No condensation)

Corrosive gases

None

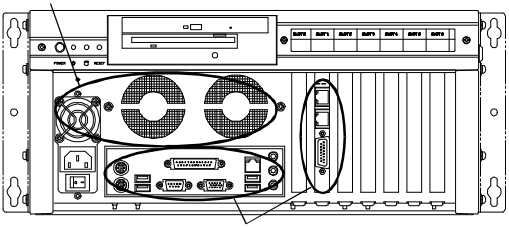
Floating dust particles

Not to be excessive

Inspection

Inspect the product periodically as follows to use it safely.

The ventilation slits are not covered, and neither dust nor alien substance is attached to the ventilation slits.



The connector has no stain or corrosion.

Storage

When storing this product, keep it in its original packing form.

(1) Wrap it in the packing material, then put it in the box.

(2) Store the package at room temperature at a place free from direct sunlight, moisture, shock, vibration, magnetism, and static electricity.

FCC PART 15 Class A Notice

NOTE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference at his own expense.

WARNING TO USER

Change or modifications not expressly approved the manufacturer can void the user's authority to operate this equipment.

2. Overview

Specification

Table 2.1. Functional Specifications *<1/2>*

Item	Specifications
Motherboard	D845GEBV2L (Intel) *1
CPU	Pentium 4 2.4BGHz FSB 533MHz(Intel) L2 Cache : 512KB
Memory	256 MB standard DDR SDRAM(DDR333 PC2700) 256MB x 1(non ECC) 2GB(Max.) (184 pin DDR SDRAM Socket x 2) DDR333/266 non ECC(ECC memory works even in non-ECC monde.)
Chip set	Intel 845GE
Video	Intel 82845GE (Integrated in the 845GE chipset)
Display I/F	Analog RGB MINI D-SUB15 pin
Audio	AC97 compliant line input, line output, microphone input
FDD I/F	3.5 inch FDD(2 mode) *2
IDE HDD I/F	Primary : 3.5 inch RAID unit (for only RAID1) 40GB Ultra DMA/100 (Configuration: 2.5 inch HDD 40GB x 2) Secondary : 5-inch CD-ROM (24x speed) *2
Serial I/F	Max. 115,200bps 9 pin D-SUB
Parallel I/F	25 pin D-SUB
LAN I/F	Intel 82562ET 10BASE-T/100BASE-TX RJ-45 connector
USB I/F	USB2.0 front 4 port, on-board 2 port
Keyboard I/F	PS/2 type keyboard (6 pin MINI DIN connector)
Mouse I/F	PS/2 type mouse (6 pin MINI DIN connector)
Real time clock	Accuracy : ±2 minutes/month(25°C)
Expansion slot	AGP : 1 slot 4X/2X 1.5V PCI : 5 slots
Power supply capacity	Total capacity for AGP x 1, PCI x 5, and USB x 6 *3 +5V : 6.0A +12V : 1.0A +3.3V : 3.0A -12V : 0.4A (only PCI slot) +1.5V : 0.5A (only AGP slot)
Attach-able board Dimension (mm)	Length (L) : 200(Max.) SLOT0 and SLOT3 to SLOT6 130(Max.) SLOT2 (Assuming that the PC-RAS(PCI) is plugged in SLOT1) High (H) : 87(Min.) to 122(Max.) *4
RAS functions	PC-RAS(PCI) (CONTEC) *5
Monitor functions	Temperature, DC voltage, fan, and RAID monitors
Web functions	Setting, monitoring, and remote power control
WDT	Monitor interval: 500µsec to 10min
General-purpose I/O	Four channels of each I/O
Miscellaneous	Log function
Chassis	Wall-Mount TYPE (CONTEC)
FAN	Front fan (intake) x 2; Rear fan (exhaust) x 1 *6
SW, LED	POWER-ON SW, RESET SW, POWER LED, HDD LED

Table 2.1. Functional Specifications <2/2>

Item	Specifications
Support OS *7	PC-RAS(PCI) Utility soft supported OS *8 Windows XP, Windows 2000
	OSs verified by CONTEC *9 Windows XP Professional Windows 2000 Professional
Input supply voltage	90 to 264VAC(47 to 63Hz) Continuous input
Current consumption	450VA(Max.) *10
External dimensions (mm)	396(W) x 180(H) x 287(D) (Does not contain the attachment fitting)
Weight	Approx.12.9kg

*1 For detailed specifications of the motherboard, refer to the motherboard manual.
View the manual on the bundled CD-ROM (prepared by Intel) or the one downloaded from the Intel's web site.

*2 Integral 5-inch type made up of a 5-inch low-profile CD-ROM (24x speed) drive and a 3.5-inch low-profile FDD (two-mode type).
Neither a 5-inch nor 3.5-inch drive can be added.

*3 In standby mode, power (+5VSB) cannot be supplied from the USB or PS/2 connector.
+3.3VSB of the PCI slot cannot be supplied.

*4 The minimum height limit is the minimum dimension at which a board can be fixed by the board stopper.
Low-profile boards cannot be fixed by the board stopper.

*5 Refer to the manual for the PC-RAS(PCI) for its detailed specifications.

*6 Power to the chassis and CPU fans is supplied from the PC-RAS(PCI).
Fan connectors on the motherboard are not available.

*7 Obtain the motherboard driver copied from the bundled CD-ROM (prepared by Intel) or downloaded from the Intel's web site.

*8 Use the PC-RAS(PCI) utility software found in the bundled FD (prepared by CONTEC).

*9 It has been verified that the MPC-WA1RA allows either OS to be installed from the CD-ROM drive.

*10 When the expansion slots are being used

Table 2.2. Installation Environment Requirements

Parameter			Requirement description
Power supply specifications	Allowable instantaneous power outage		Less than 10ms
	Dielectric strength		1.8 kVAC (input-FG) One minute
			50MΩ (500VDC)
Ambient specifications	Operating temperature		0 to 35°C
	Storage temperature		-10 to 60°C
	Humidity		20 to 80%RH(No condensation)
	Floating dust particles		Not to be excessive
	Corrosive gases		None
	Line-noise resistance	Line noise	AC line/2kV, Signal line/1kV (IEC1000-4-4Level3, EN61000-4-4Level3)
		Static voltage resistance	Contact discharge/4kV (IEC1000-4-2Level2, EN61000-4-2Level2)
			Atmospheric discharge/8kV (IEC1000-4-2Level3, EN61000-4-2Level3)
	Vibration resistance *1	When the HDD is in use.	10 to 57Hz/semi-amplitude 0.015mm 57 to 150Hz: 1.96m/s^2 40 min. each in x, y, and z directions (JIS C0040-compliant, IEC68-2-6-compliant)
		When the HDD is not in use.	10 to 57Hz/semi-amplitude 0.035mm 57 to 150Hz: 4.9m/s^2 40 min. each in x, y, and z directions (JIS C0040-compliant, IEC68-2-6-compliant)
	Anti shock *1	When the HDD is in use, and is not in use	98m/s^2, half-sine shock for 11 ms in x, y, and z directions (JIS C0041-compliant, IEC68-2-27-compliant)
	Grounding		Class D grounding (previous class 3 grounding)

*1 When the FDD and CD-ROM are not in use.

Layout Drawing

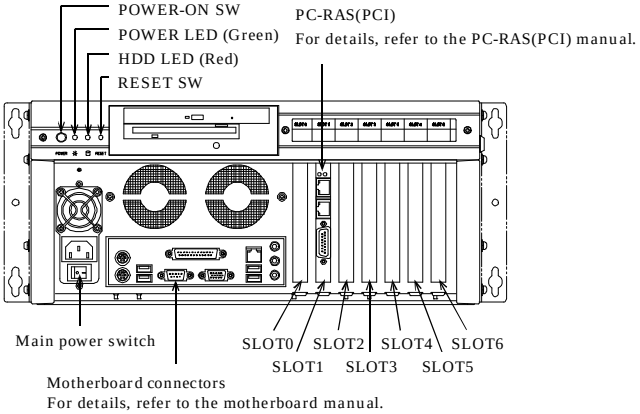


Figure 2.1. Layout Drawing

External Dimensions

When closed

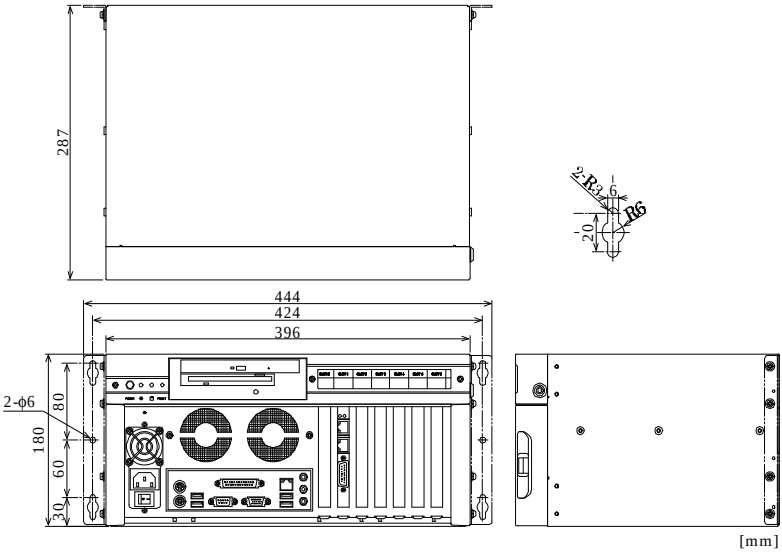


Figure 2.2. External Dimensions (When closed)

When opened

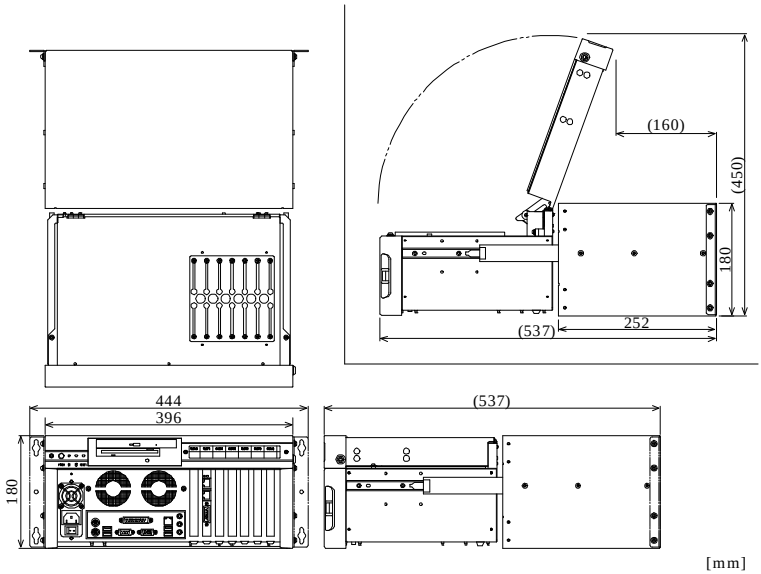


Figure 2.3. External Dimensions (When opened)

3. Hardware Setup

Before setting up the hardware of the MPC-WA1RA, always make sure that the power supply is off.

Opening and closing the chassis

Opening procedure

Take the following steps to open the chassis.

1. Use the attached key to unlock the chassis (as (1) in the sketch shown below).
2. Pull the left and right handles toward you (as (3) in the sketch) while holding down their latches ((2) in the sketch).

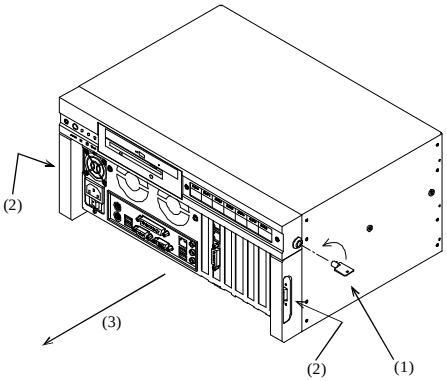


Figure3.1 Unlocking the chassis

3. Remove a pair of left and right screws ((4) in the sketch shown below).

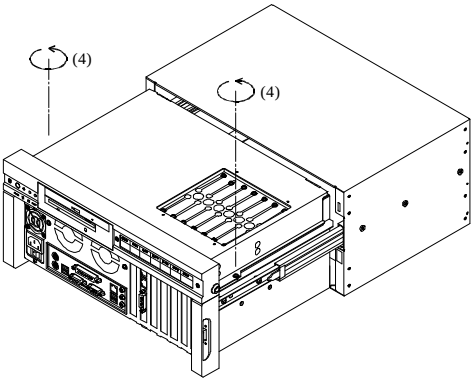


Figure 3.2. Removing the screws

4. Open the chassis upward (as (5) in the sketch shown below).

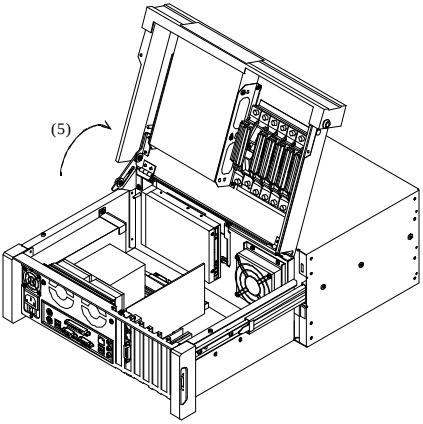


Figure 3.3. Opening procedure

Closing the chassis

1. Close the top lid of the chassis while pulling the lever shown in the sketch below.

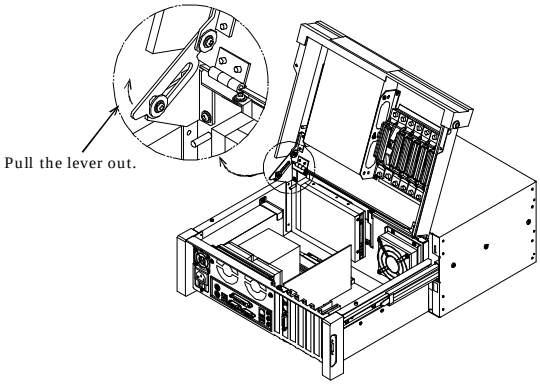


Figure 3.4. Closing the chassis

2. Take the steps to open the chassis in reverse order to retract and lock the chassis.

Drawing out the chassis

1. Draw the chassis toward you from the housing, then pull it out (as (2) in the upper sketch below) while holding down the black levers ((1) in the sketch) on both sides.

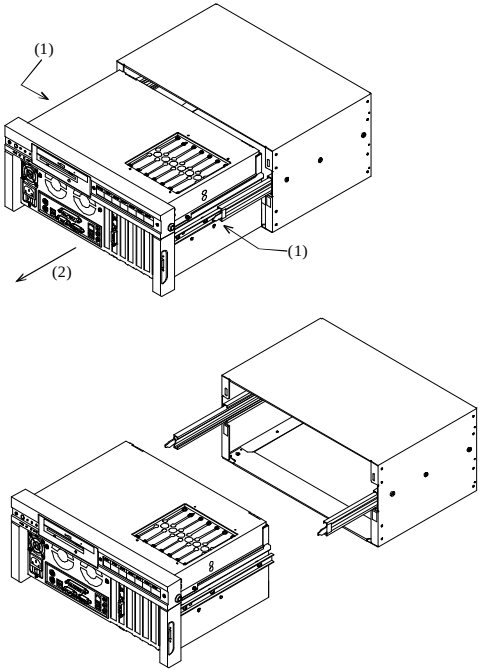


Figure 3.5. Drawing out the chassis

2. To draw the chassis into the housing, take the steps to draw it out in reverse order to put it back in place.

⚠ CAUTION

When drawing the chassis from or into the wall-mounted housing (fastened onto the wall), place a table below the housing in advance not to let the chassis fall accidentally.

Securing the power cable

Removing the power cable retaining bracket fixing screw

Remove the screw ((1) in the following sketch) below the main power switch so that the power cable retaining bracket can be attached.

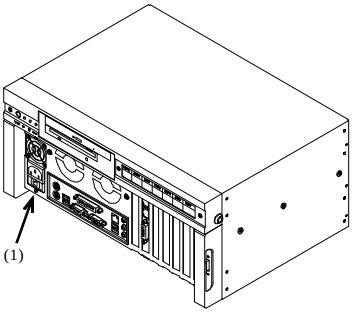


Figure 3.6. Removing the screws

Attaching the power cable retaining bracket and fixed clamp

Insert the fixed clamp into the power cable retaining bracket as (2) in the sketch below. Then, use the screw removed above and the supplied screw (M3x6) to fasten the power cable retaining bracket. Attach the retaining bracket with its large notch up (for exhaust of the power supply's fan).

Use the power cable retaining bracket, fixed clamp, and screw (M3x6) supplied as accessories for the MPC-WA1RA.

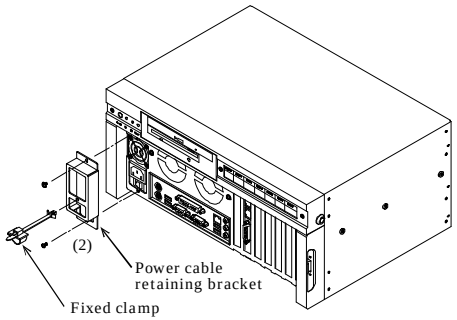


Figure 3.7. Fastening the power cable retaining bracket

Plugging the power cable

Plug the power cable deep into the inlet (as (3) in the following sketch).

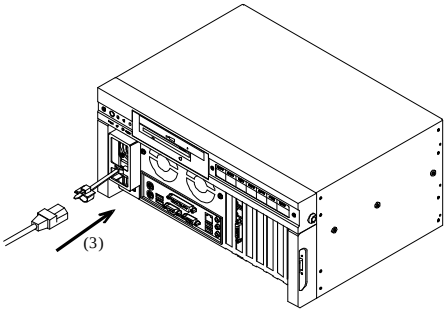


Figure 3.8. Plugging the power cable

Securing the power cable

Pass the power cable through the fixed clamp and lock the clamp.
Slide the locked clamp toward the power cable plug ((4) in the following sketch) to secure the power cable.

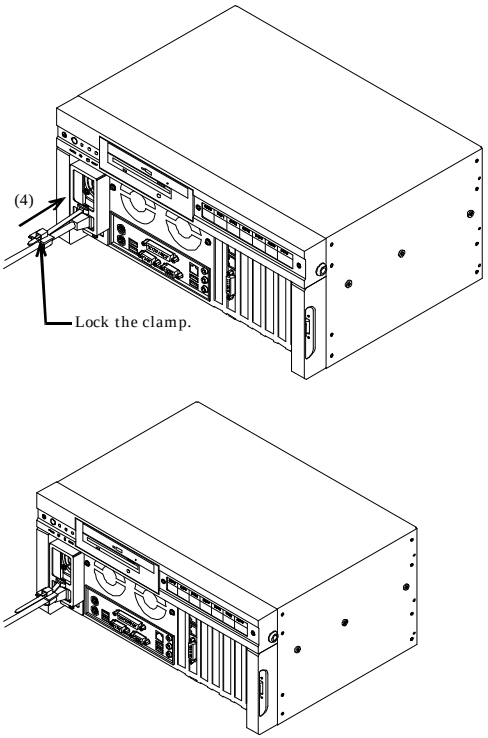


Figure 3.9. Securing the power cable

Removing the faceplate

Remove three screws from the front panel to remove the faceplate as shown below.

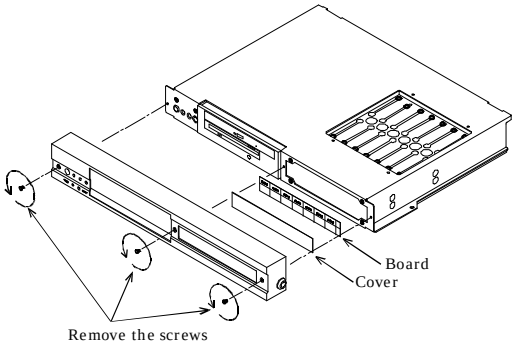


Figure 3.10. Removing the faceplate

Removing the filter

Remove the filter as shown below.

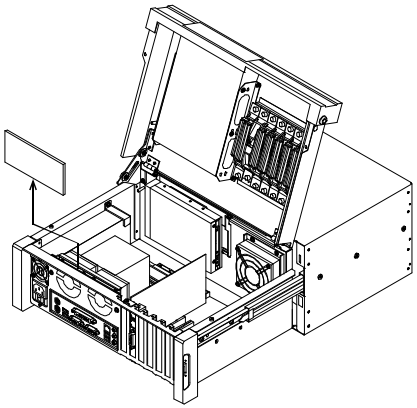


Figure 3.11. Removing the filter

⚠ CAUTION

Clean the filter periodically.

Using the MPC-WA1RA with the filter left dirty increases the interior temperature of the chassis, resulting in unexpected trouble.

Securing the board

Mounting the board

Plug the board into a slot and secure it using a supplied screw (M3 x 6).

Attach supplied slot covers to the slots with no board inserted.

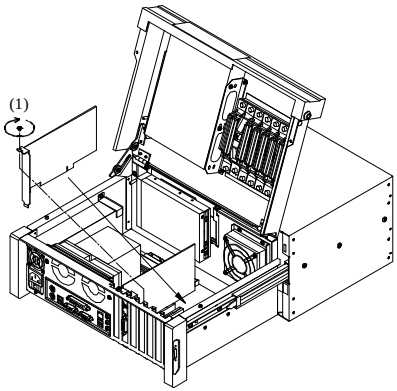


Figure 3.12. Mounting the board

⚠ CAUTION

Make sure that the board has been mounted securely.

Securing the board

Loosen the screw ((2) in the following sketch) in the board fastening clamp first as shown below.

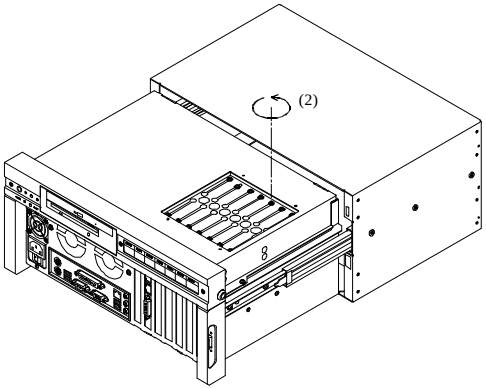


Figure 3.13. Securing the board (1/2)

Slide the loosened screw to fasten the board with the fastening clamp, then tighten up the screw (as (3) in the following sketch).

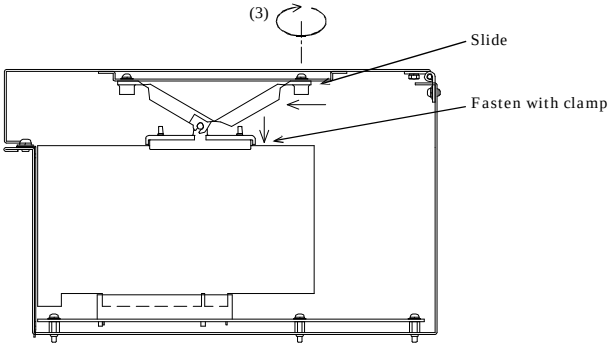


Figure 3.13. Securing the board (2/2)

Removing the 3.5-inch bracket

As shown below, remove two screws and remove the 3.5-inch bracket by sliding it upward.

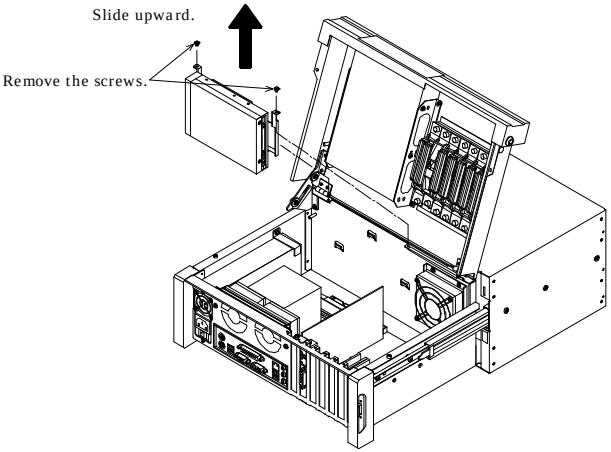


Figure 3.14. Removing the 3.5-inch bracket

Removing the 5-inch bracket

As shown below, remove four screws and remove the 5-inch bracket by sliding it downward.

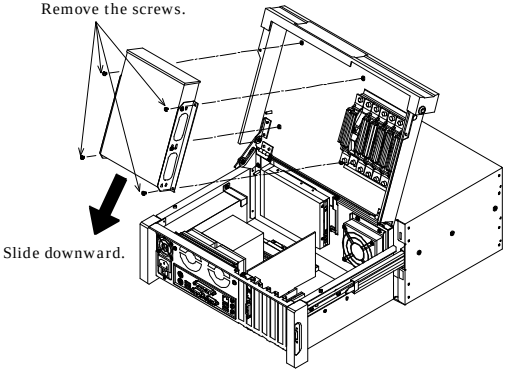


Figure 3.15. Removing the 5-inch bracket

Securing the chassis

When wall-mounting the MPC-WA1RA on a panel, secure the main body as instructed below.

Attaching the chassis fastening brackets

Draw the chassis from the mousing, then attach one chassis fastening bracket to the chassis using flat-head screws (M3 x 5). To the housing, attach the other chassis fastening bracket using screws (M3 x 6).

The two chassis fastening brackets are different in type. Attach the right ones at the right positions in the right orientations.

Use the chassis fastening brackets, flat-head screws, and screws (M3 x 6) supplied as accessories for the MPC-WA1RA.

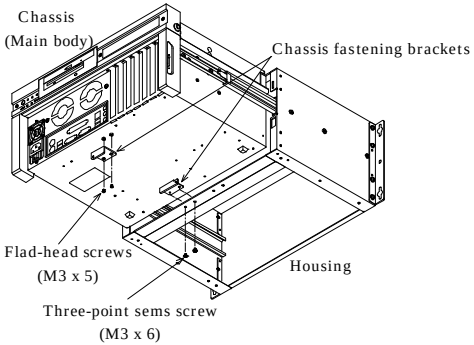


Figure 3.16. Attaching the chassis fastening brackets

Securing the chassis

Secure the chassis enclosed in the housing by tightening the screw (M3 x 6) on the chassis fastening bracket on the front face.

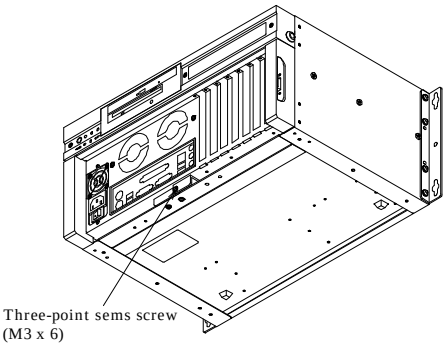


Figure 3.17. Securing the chassis

Connections

Internal connections

Leave the internal connections untouched as possible because their wiring is complicated.

If you disconnect a wire or cable, jot down its connection in advance so that you can restore it later.

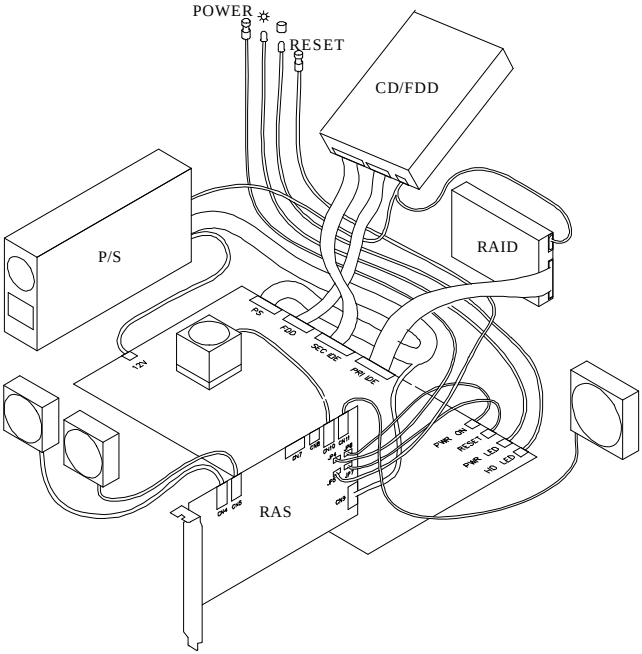


Figure 3.18. Internal connections (image)

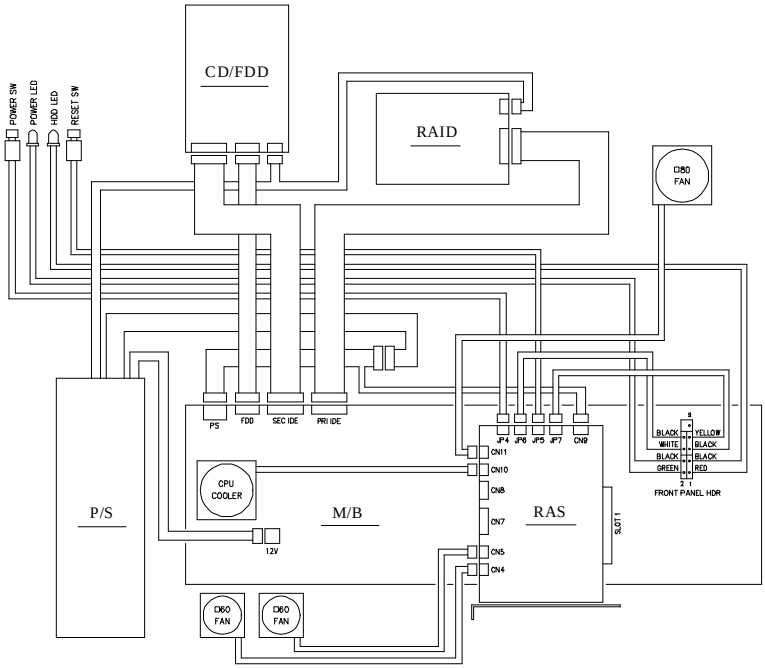


Figure 3.19. Internal connections (block diagram)

When connecting internal components, refer to the internal connection diagram and use the following procedure.

1. Connecting DC power cables to the RAS board and to the motherboard

- Connect the power distribution cable to the ATX20P connection, of all the DC power cables from the power supply (abbreviated P/S). Connect the 20P connector of the connected power distribution cable to the PS connector on the motherboard (abbreviated M/B). Connect the 4P connector of the power distribution cable to the CN9 connector on the PC-RAS(PCI) (abbreviated RAS) board. Note that the 4P connector has the same shape as the peripheral 4P connector (large) of the DC power cable from the P/S. Be careful not to make a mistake to connect the peripheral 4P connector (large) of the DC power cable to the CN9 connector on the RAS board. Note also that the 4P connector of the power distribution cable is dedicated to the RAS board and must not be connected to any peripheral device. The peripheral device will not work correctly if the 4P connector is connected to it by mistake.
- Connect the ATX12V4P connector of a DC power cable to the 12V connector (near the processor) on the M/B.

2. Connecting DC power cables to peripheral devices

- Connect the peripheral 4P connectors (large) from the P/S to the power connectors on the FDD and CD-ROM drive.

- Connect the peripheral 4P connector (small) from the P/S to the power connector for the IDE2S-LE40CT (abbreviated RAID).

  You can neither add any peripheral device (such as an HDD) or use a peripheral-dedicated DC power cable (4P large or small) for any device other than the predetermined peripheral.

3. Connecting signal cables to the FDD and CD-ROM drive

- Connect the FDD connector on the M/B to the FDD's 34P connector using the round FDD cable (34P).
- Connect the SEC IDE connector on the M/B to the CD-ROM drive's 40P connector using the round IDE cable (40P).

4. Connecting the RAID signal cable

- Connect the PRI IDE connector on the M/B to the RAID 40P connector using the IDE ribbon cable (80-conductor type supporting ATA 100/66).
- Connect the CN8 connector on the RAS board to the RAID 10P connector using the dedicated RAID cable.

5. Connecting the fan cables

- Connect the processor fan cable to the CN10 on the RAS board.
- Connect the cable for the chassis rear fan (80-mm squared exhaust fan) to the CN11 connector on the RAS board.
- Connect the cable for the chassis front left fan (60-mm squared intake fan) to the CN4 connector on the RAS board.
- Connect the cable for the chassis front right fan (60-mm squared intake fan) to the CN5 connector on the RAS board.

For connection to the fan connectors on the RAS board, use the specified fan cables. If you make a wrong fan connection, the RAS board cannot perform fan monitoring normally.
The fan connector on the M/B cannot be used. Do not connect any fan cable to it.

6. Connecting the chassis SW and LED cables

- Connect the chassis POWER SW cable (labeled POWER at the connector) to the JP4 (2P) connector on the RAS board. The RAS board connector is nonpolarized.
- Connect the chassis RESET SW cable (labeled RESET at the connector) to the JP5 (2P) connector on the RAS board. The RAS board connector is nonpolarized.
- Connect the green and black chassis POWER LED cables (a pair of cables provided with one connector each) to pins 2 and 4 of the FRONT PANEL HDR on the M/B, respectively.
- Connect the red and black chassis HDD LED cables (labeled H.D.D LED at the connectors) to pins 1 and 3 of the FRONT PANEL HDR on the M/B, respectively.
- Connect the JP6 (2P) connector on the RAS board to pins 6 and 8 of the FRONT PANEL HDR on the M/B using the POWER cable (black and white, two-conductor cable labeled POWER at the connector). The connector is nonpolarized.
- Connect the JP7 (2P) connector on the RAS board to pins 5 and 7 of the FRONT PANEL HDR on the M/B using the RESET cable (black and yellow, two-conductor cable labeled RESET at the connector). The connector is nonpolarized.

For details on each connector, refer to the relevant manual.

Connecting the LAN cable

For connecting the LAN interface on the motherboard, the RAS board PC-RAS(PCI) provides a hub through which to connect the MPC-WA1RA to the host. Connect the LAN connector on the motherboard to one of the two LAN connectors on the PC-RAS(PCI) board (either will do) using the supplied LAN cable (30-cm cross cable in category 5). Connect the other LAN connector on the RAS board to the host using either a straight or cross cable. The LAN connection cable (category 5) needs to be prepared by the customer. Refer to the PC-RAS(PCI) manual for details.

Connecting the serial cable

A mounting bracket with two serial port (male DB-9 connector) ribbon cables connected is supplied as an accessory. It is used for the RAS board PC-RAS(PCI) to use an external UPS. Refer to the PC-RAS(PCI) manual for how to attach and use that accessory.

Setting

Factory settings of the motherboard BOXD845GEBV2L

The motherboard is shipped with the initial values untouched.

For details, see the BOXD845GEBV2L manual.

Factory settings of the RAID controller IDE2S-LE40CT

Table 3.1. IDE2S-LE40CT factory setting

No.		Factory setting	Function
DIP-SW1	1	OFF	
	2	OFF	
	3	OFF	
	4	OFF	
DIP-SW2	1	OFF	
	2	OFF	
	3	OFF	
	4	OFF	
DIP-SW3	1	OFF	
	2	ON	Serial Enable
	3	OFF	
	4	OFF	

For details, refer to IDE2S-LE40CT manual.

Use the motherboard with bit 2 in the DIP-SW3 set to ON (Serial Enable). In the “Serial Disable” state, the PC-RAS(PCI) cannot perform RAID monitoring.

RAS board [PC-RAS(PCI)] factory setting

Table 3.2. PC-RAS(PCI) factory setting

No.		Factory setting	Function
SW1		0	
SW2	1	OFF	
	2	OFF	
	3	OFF	
	4	OFF	
	5	OFF	
	6	OFF	
	7	OFF	
	8	OFF	

For details, refer to PC-RAS(PCI) manual.

5 inch CD-ROM factory setting

Table 3.3. 5 inch CD-ROM factory setting

No.	Factory setting	Function
J4	SHORT	SHORT: Master
J5	OPEN	
J6	OPEN	

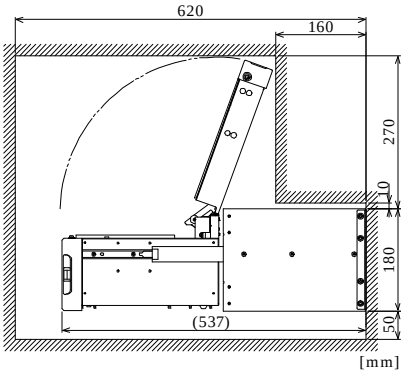
Use the CD-ROM drive as the master device left as factory-set.

Installation condition

To use the MPC-WA1RA at an ambient temperature within the range of acceptable installation environment conditions, allow a clearance of at least 10 mm above the chassis and a clearance of at least 50 mm beside and below.

Install the chassis only horizontally (at a vertical or horizontal slant angle within 5 degrees). It cannot be installed vertically.

Side



Top

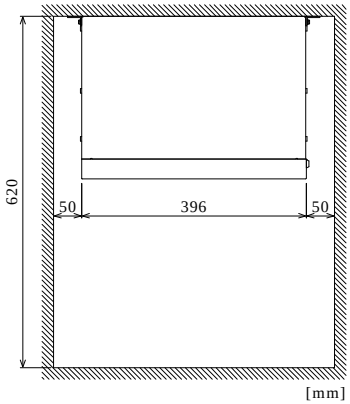


Figure 3.20. Clearances around the chassis

4. Each Function

POWER SW

To supply power to the MPC-WA1RA, turn on the main power switch, then press the POWER-ON SW.

RESET SW

The MPC-WA1RA has a hardware reset switch (RESET SW). As this switch is designed hard-to-press to prevent itself from being pressed accidentally. Use a pointed object to press the switch.

Motherboard connectors

For the functions of motherboard connectors, refer to the motherboard manual.

RAS board

For the functions and use of the RAS board [PC-RAS(PCI)], refer to the PC-RAS(PCI) manual.

RAID

For the functions and use of the RAID [IDE2S-LE40CT], refer to the IDE2S-LE40CT manual.

MPC-WA1RA

User's Manual

CONTEC CO., LTD.

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